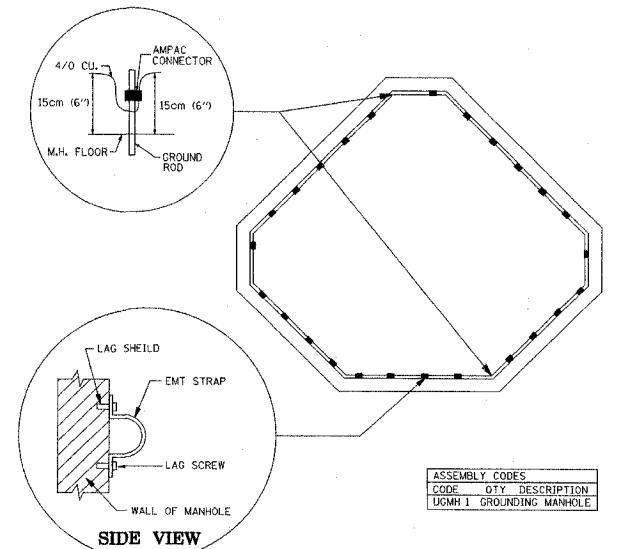


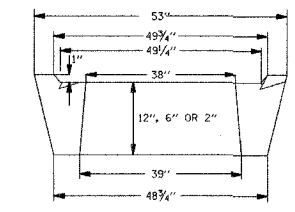
- NOTES:
1. CONCRETE 4500 PSI AT 28 DAYS
  2. EACH ADJUSTING RING SHALL COME WITH 14 FEET OF 1 INCH DIAMETER JOINT SEALANT TAPE.
  3. WEIGHT 915LBS TO 315LBS



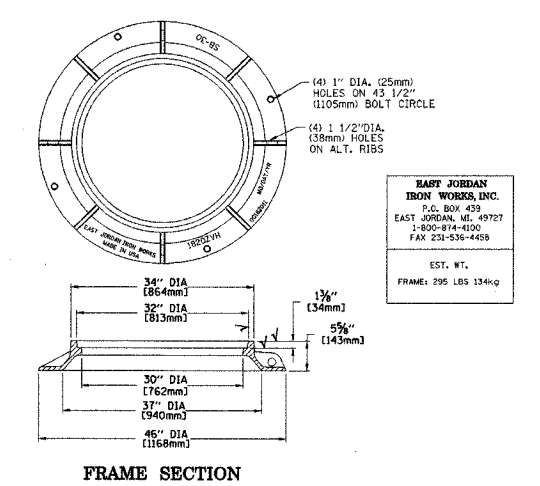
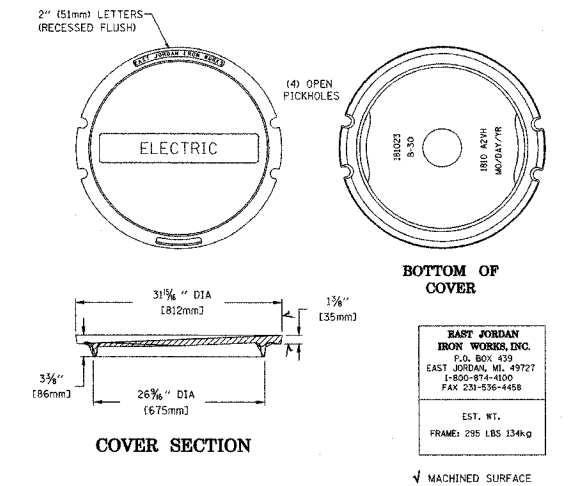
1. KEEP 4/0 CU IN ONE PIECE AROUND INNER WALL; TIE TOGETHER WITH ONE AMPAC. 4/0 IS SUPPORTED ALONG INNER WALL OF M.H., 15cm (6") ABOVE M.H. FLOOR, AT (2 FOOT) INTERVALS.
2. COPPER STRAP AND LEAD ANCHOR SHALL BE INSTALL AT 60cm (TWO FOOT) INTERVALS.
3. THE TWO KNOCKOUTS IN THE FLOOR SHOULD BE USED. IF SOLID ROCK IS ENCOUNTERED UNDER THE MANHOLE, REFER TO ENGINEERING. COUNTERPOISE SHALL BE REQUIRED.
4. TWO 1.5 METER (5') GROUND RODS AND ONE COUPLING SHOULD BE INSTALLED WITH A DRIVING STUD PER KNOCKOUT, (2 LOCATIONS)
5. MEASURE GROUND RESISTANCE AS SOON AS INSTALLED. COUNTERPOISE, IF REQUIRED, SHALL BE INSTALLED 12" ABOVE CONDUIT IN TRENCH MANHOLE TO MANHOLE.

NAPERVILLE PUBLIC UTILITIES DEPARTMENT ELECTRIC STANDARDS	GROUNDING DETAIL TYPE G MANHOLE	DATE: 03-06-00 C30-1170
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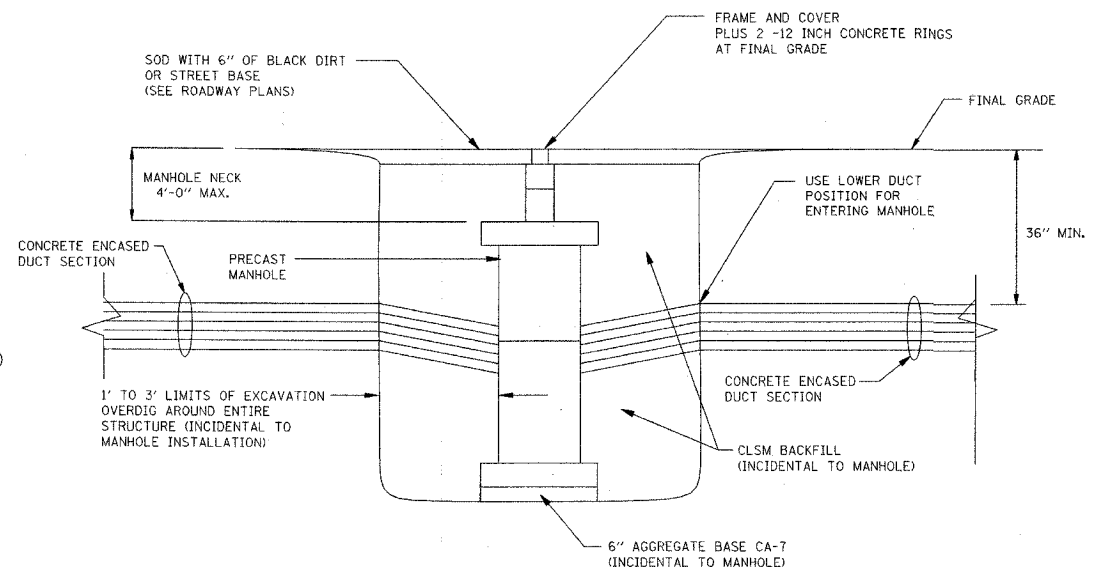
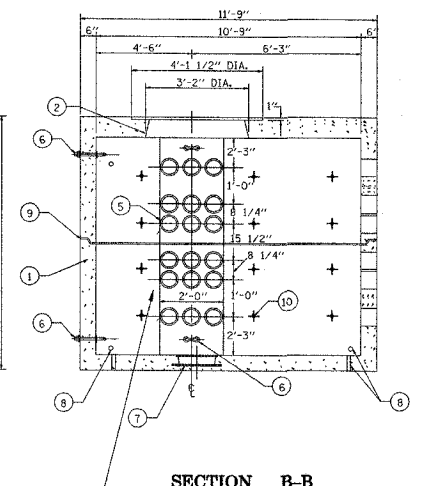
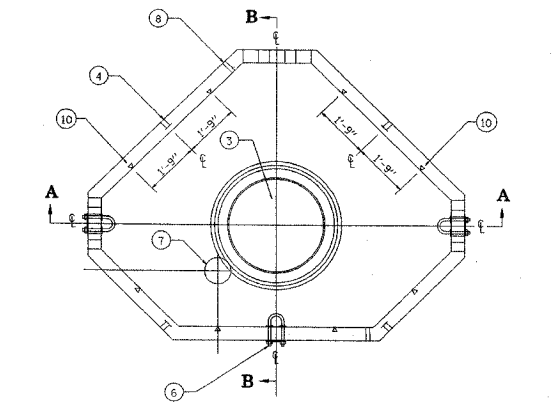
INSTALL TWO RINGS.  
FRAME AND COVER  
PER MANHOLE



NAPERVILLE PUBLIC UTILITIES DEPARTMENT ELECTRIC STANDARDS	MANHOLE ADJUSTING RING	DATE: 10-30-92 M30-1190
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NAPERVILLE PUBLIC UTILITIES DEPARTMENT ELECTRIC STANDARDS	ELECTRIC MANHOLE FRAMES & LIDS
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- NOTE:
- 1) CLSM TO BE PLACED 360 DEGREES AROUND MANHOLES TO GRADE
  - 2) SEE MANHOLE DETAIL DRAWINGS FOR DIMENSIONS AND WEIGHT.
  - 3) CONTRACTOR TO ESTABLISH LEVEL AND GRADE FOR MANHOLE.
  - 4) MANHOLES DELIVERED TO SITE BY MANUFACTURER. CONTRACTOR TO UNLOAD, STORE AND INSTALL.
  - 5) CONTRACTOR SHALL SUPPORT, REROUTE UTILITIES AS REQUIRED.

TYPICAL EXCAVATION DETAIL  
TYPE "G" MANHOLE

ITEM	QTY	DESCRIPTION	ITEM	QTY	DESCRIPTION
1		30,000 LBS. TOTAL MANHOLE WEIGHT	6	4	PULL-IN IRON, STAINLESS STEEL, ONE OPPOSITE EACH DUCT ENTRANCE.
		15,800 LBS. TOP SECTION WEIGHT	7	1	SUMP DEPRESSION.
		14,200 LBS. BASE SECTION WEIGHT	8	4	GROUND ROD KNOCKOUT, 1" DIA. X 5-1/2" DEEP, 1/2" THICK KNOCKOUT PORTION.
2	2	12" CONCRETE ADJUSTING RING, SEE M30-1190 FOR DIMENSIONS	9	62	JOINT SEALANT TAPE, 1" DIA. (INCLUDES 28' FOR 2 ADJ. RINGS.)
3	1	OPENING PER DIMENSIONS SHOWN	10	32	CABLE RACK INSERTS, STAINLESS STEEL, 3" DEEP, WITH 1/2" X 3" STAINLESS STEEL HEX CAP SCREW AND WASHER.
4	8	1" DIA. PLASTIC LIFTING INSERTS WITH (8) 1" X 4" LONG HEX CAP SCREW, GRADE 2.			
5	54	TERMINATORS, BELLED END TOWARD INSIDE TO ACCEPT 6" NOM. SCHEDULE 40 (PVC DUCT)			
NAPERVILLE PUBLIC UTILITIES DEPARTMENT ELECTRIC STANDARDS		TYPE G MANHOLE		DATE: 10-30-92 M30-1170	

REVISIONS		CITY OF NAPERVILLE
NAME	DATE	
		MAIN STREET BRIDGE DRAINAGE & UTILITY DETAILS
SCALE: N.T.S.		DRAWN BY: MXF
DATE: JULY 9, 2004		CHECKED BY: MJE